

CLAIMS

What is claimed is:

- 1 1. An electrophoretic display comprising:
2 a substrate;
3 at least one capsule containing a suspending fluid and at least one charged
4 particle, said charged particle having an optical property; and
5 at least two electrodes disposed on said substrate adjacent said at least one
6 capsule and positioned in a spaced apart relationship to one another,
7 wherein a potential difference between said electrodes causes the particles
8 to migrate toward at least one of said at least two electrodes, thereby effecting
9 change in visual state.
- 1 2. The display of claim 1, wherein said suspending fluid is substantially transparent.
- 1 3. The display of claim 1, wherein said at least one charged particle has a black
2 color.
- 1 4. The display of claim 1, wherein said at least one charged particle has a white
2 color.
- 1 5. The display of claim 1, wherein one of said at least two electrodes is substantially
2 transparent.
- 1 6. The display of claim 1, wherein both of said at least two electrodes are
2 substantially transparent.
- 1 7. The display of claim 1, wherein one of said at least two electrodes has a first
2 optical property and the other of said at least two electrodes has a second optical property.
- 1 8. The display of claim 6, wherein said at least one charged particle is black and
2 wherein application of a first voltage potential to said black electrode causes said black

3 particles to migrate within said capsule to a location adjacent said black electrode,
4 causing said capsule to appear substantially white, and wherein application of a second
5 voltage potential to said black electrode causes said black particles to migrate within said
6 capsule to a location adjacent said white electrode causing said capsule to appear
7 substantially black.

1 9. An electrophoretic display comprising:
2 at least one capsule containing a suspending fluid and at least one particle having
3 a first optical property;
4 at least two electrodes, each having a second optical property adjacent said at least
5 one capsule; and
6 at least one electrode having said first optical property adjacent said at least one
7 capsule;
8 wherein application of a voltage potential to said at least two electrodes causes the
9 capsule to change visual state.

1 10. The electrophoretic display of claim 8, wherein each of said at least two electrodes
2 has a different optical property.

1 11. The electrophoretic display of claim 8, wherein said suspending fluid is dyed.

1 12. The electrophoretic display of claim 8, wherein said suspending fluid is
2 substantially transparent.

1 13. The electrophoretic display of claim 8 wherein said at least one particle has a
2 black color.

1 14. The electrophoretic display of claim 8 wherein said at least one electrode is
2 substantially transparent.